

Claims:

1. Method for guiding a driverless, multi-track vehicle along a predetermined path, which
5 vehicle rolls on wheels (4, 6) separated from each other in the vehicle width direction, wherein
the vehicle is steered such that the vehicle follows the predetermined path, characterized in that
the vehicle is steered by changing the torque applied to at least one of its wheels.
2. Method according to claim 1, characterized in that at least one wheel is braked.
- 10 3. Method according to claim 2, characterized in that a drive torque of the vehicle is increased
in correspondence to the braking moment, so that the speed of the vehicle is not changed by a
steering brake intervention.
- 15 4. Method according to claim 1, characterized in that at least two wheels (4, 6) disposed on
different sides of the vehicle are driven by their own motors (30) whose drive torque is changed
for steering the vehicle.
5. Method according to claim 4, characterized in that the drive torques of the motors (30) are
20 changed such that the total drive torque of the vehicle remains constant during a steering
intervention.
6. Multi-track vehicle guidable along a predetermined path, comprising
 - at least one drive apparatus (30) for driving at least one vehicle wheel,
 - 25 a braking apparatus (8; 30) for selective braking of at least two wheels (4, 6) disposed
on different sides of the vehicle,
 - a steering apparatus for changing the driving direction of the vehicle,
 - a guiding device (10, 14) for ascertaining a deviation between a predetermined path (12)
and an actual path and
 - 30 a control device (14) for controlling the operation of the vehicle such that the vehicle
moves with a predetermined speed along the predetermined path,
characterized in that the steering device is formed by the braking apparatus (8; 30) that
brakes the wheels (4, 6) when there is a deviation between the actual path and the

predetermined path such that the deviation between the actual path and the predetermined path is minimized.

7. Vehicle according to claim 6, characterized in that the drive apparatus, the braking apparatus and the steering apparatus are formed by at least two selectively controllable motors (30) that drive wheels (4, 6) disposed on different positions of the vehicle and are controlled by the control device (14) such that, when there is a deviation between the actual path and the predetermined path, the vehicle changes its direction by selectively changing the moments acting upon the wheels such that the deviation decreases.

8. Vehicle according to claim 6 or 7, characterized in that the vehicle (2) carries a barrier (34) for a collision with another vehicle.

9. System for performing crash tests by applying the method according to one of claims 1-5 and by using at least one vehicle according to one of claims 6-8, comprising:

a guide apparatus (12) for defining a predetermined path and a speed control apparatus cooperating with the vehicle for controlling the vehicle speed such that the vehicle follows the predetermined path with a predetermined speed progression.

10. System according to claim 9, characterized in that the guide apparatus comprises a navigation apparatus that works by distance measurements with respect to predetermined reference locations.